<div align="center">**Remarks**</div>

Status of the Claims

Claims 1-3, 6-17, 20-23, 25, 28-41, 43-46, 48, 49, and 52-67 were pending in the application. All claims were rejected in the Office Action mailed July 31, 2007. By this paper, claims 43 and 65 have been amended. In view of the amendments and following remarks, reconsideration of the claims is respectfully requested.

Claim Objections

Applicant has amended claim 65 in accordance with the Examiner's suggestions.

Double Patenting

A terminal disclaimer is enclosed herewith to obviate the double patenting rejection.

Claim Rejections – 35 U.S.C. 112

Applicant has amended claim 43 to correct the dependency error noted by the Examiner.

Claim Rejections – 35 U.S.C. 102

Claims 1-3, 7-11, 14-17, 20-23, 25, 29-33, 37-41, 43-46, 48, 49, 53-57, and 60-67 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al. ("Wong") in view of Killian. Claims 6, 28, and 52 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Killian and further in view of Maryka et al.

("Maryka"). Claims 12, 34, and 58 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Killian and further in view of Hassell et al. ("Hassell"). Claims 13, 35, and 59 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Killian and further in view of Ellis et al. ("Ellis"). These rejections are respectfully traversed.

Claim 1 has been amended to recite an article of manufacture including a computer-readable medium comprising:

> a program interface object (PIO) for representing a particular television program within a memory of an interactive television system, the PIO comprising a separate data structure for encapsulating:
>
> …
>
> program code for carrying out a plurality of user-selectable actions within the interactive television system in connection with the television program, wherein the **program code comprises a routine in a machine independent format that is executable in a Java virtual machine** within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action, and wherein **at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data**; and

1.   The cited references do not teach or suggest that PIOs encapsulate ***program code*** in the form of ***routines*** for implementing associated actions.

With respect to the limitations of claim 1 requiring that a PIO encapsulate "program code for carrying out a plurality of user-selectable actions," the Office Action refers to elements 450 and 470 of Wong's FIG. 7, as well as col. 22, lines 40-56.

Applicant respectfully points out that element 450 refers to a token, which is what the Office Action is analogizing to the claimed PIO. Element 470 refers to "other elements," as shown FIG. 8 as reproduced below:
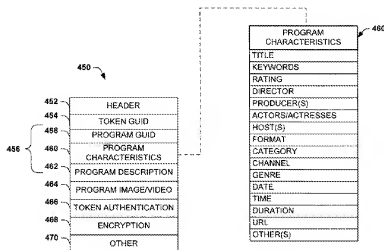

Fig. 8

The so-called "other elements" cannot reasonably be read to include the claimed "program code." Wong mentions that the "other elements 470 may be employed to perform other functions related to the recording or playback of a program…" Col. 22, lines 41-43. However, Applicants respectfully point out that the sole example provided by Wong for the "other elements" is in the very next sentence: "For example, account information, such as billing, account status, etc. may be implemented within the other element **470**." Normally, account information is not considered to be "program code" within any reasonable interpretation of the phrase.

Note that Wong does not say that the other elements, themselves, perform other the functions, as would be the case with program code. Rather, he says that the other elements "may be employed to perform other functions." Account information "may be employed" to carry out functions, such as renting a video-on-demand movie, but

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account information is not the same as program code that is <u>executed</u> to <u>perform</u> the function, as claimed.

Applicants respectfully submit that there is no support in Wong for the inclusion of a procedure in a token, let alone a plurality of procedures corresponding to a plurality of user-selectable actions, as claimed. Applicants believe that if Wong attempted to claim that his token included program code in the form of procedures, he would have received a §112 rejection for lack of enablement or written description. "Prior art is not enabling so as to be anticipating if it does not enable a person of ordinary skill in the art to carry out the invention." IMPAX LAB. v. AVENTS PHARMACEUTICALS, 468 F.3d 1366, 1381 (Fed. Cir. 2006).

Furthermore, to the extent the Office Action is arguing that the phrase, "other elements," somehow encompasses program code by virtue of its apparent inclusiveness, Applicants respectfully submit that the phrase cannot reasonably be construed to place the public on notice of everything that could possibly be included in a token. To argue along those lines would make every conceivable object structure unpatentable, since every form of data could be considered to be an "other element."

2. <u>The cited references do not teach or suggest that actions are encapsulated within a PIO as routines in a machine independent format and are executable in a Java virtual machine</u>.

As argued above, Wong does not teach encapsulating program code for a plurality of actions within a PIO. The addition of Killian, however, does not cure the deficiencies of Wong. Killian merely teaches that the Java language and Java applets exist. Applicants do not claim to have invented Java or machine independence. These

limitations were merely included to emphasize that the program code for carrying out actions is embedded or encapsulated within a PIO, unlike the cited prior art. Machine independence allows for PIOs to be transmitted between different types of devices, *e.g.*, between a set top box and a cell phone. Unlike traditional approaches, however, the machine-independent program code is encapsulated within (and therefore accompanies) the PIO when the PIO is sent between devices. The PIO, as noted above, encapsulates more than simply the program code, however. It also includes ***attribute data*** about <u>a single television program</u> and ***graphical data*** in the form of a pictorial icon related to <u>the single television program</u>. This type of architecture is not taught or suggested in the prior art of record.

3.   <u>The cited references do not teach or suggest that at least one of the attributes provides data used as input for a routine implementing at least one of the user-selectable actions such that the routine is not required to access resources external to the PIO for the data.</u>

PIOs are designed to be transportable from one ITV system to another (or between an ITV system and other user devices). Accordingly, certain actions (routines) may require access to particular information about the TV program. Since the repositories of that information may differ from device to device, the PIO is configured such that action routines may take as an input one or more of the attributes <u>within the PIO</u>. This eliminates the need for the action routines to have to access external resources, such as databases, for the information. See specification at pages 16, 24.

Wong, Killian, and the other cited references are silent about using attributes <u>encapsulated within a PIO</u> as input for routines <u>encapsulated within the PIO</u>, such that

the routines do not need to access external resources for information pertaining to the television program.

4. <u>The cited references do not disclose or suggest one of the actions (encapsulated as routine within the PIO) is a "send" action configured to transmit the PIO to a selected interactive television system of another user</u>.

Claims 41 and 66 recite that at least one of the actions encapsulated as a routine within a PIO comprises a "send" action configured to transmit the PIO to a selected ITV system of another user. These arguments, raised in the prior response, do not appear to be directly addressed within the Office Action. Neither Wong nor any of the other references discloses or suggests a PIO with embedded code for a "send" action configured to transmit the PIO to a selected ITV system of another user. While Wong's FIG. 5 shows tokens being sent in an email message, there is no teaching or suggestion that the action <u>code or routine</u> for sending a token is embedded or encapsulated within the PIO. Indeed, Wong appears to be merely using a standard email client, such as Microsoft Outlook, to transmit the tokens. There is no hint or suggestion that one of Wong's tokens, the structure of which is shown in FIG. 8, includes an embedded "send" action in the form of program code.

Conclusion

For at least the foregoing reasons, the cited prior art references, whether considered individually or in combination, fail to disclose each of the limitations in any of the pending independent claims. For at least the same reasons, each of the claims depending therefrom are also patentably distinct from the cited prior art. Therefore, all claims are believed to be in condition for allowance. A Notice of Allowance is

respectfully requested. The Examiner is encouraged to contact the undersigned at the

telephone number provided below for a quick resolution of any remaining issues.

Respectfully submitted,

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